

CLAIMS

[1] A flat panel display spacer having a sintered body containing Al_2O_3 , TiC, MgO, and TiO_2 ; wherein the sintered body includes 35 to 55 wt % of MgO with respect to the total weight of Al_2O_3 , TiC, MgO, and TiO_2 .

[2] A flat panel display spacer according to claim 1, wherein the sintered body contains 2.0 to 3.0 wt % of TiO_2 with respect to the total weight of Al_2O_3 , TiC, MgO, and TiO_2 .

[3] A flat panel display spacer according to claim 1 or 2, wherein the sintered body contains 7.0 to 8.0 wt % of TiC with respect to the total weight of Al_2O_3 , TiC, MgO, and TiO_2 .

[4] A method of manufacturing a flat panel display spacer, the method comprising the steps of:

mixing powders of Al_2O_3 , TiC, MgO, and TiO_2 such that the MgO powder is 35 to 55 wt% with respect to the total weight of powders of Al_2O_3 , TiC, MgO, and TiO_2 , so as to yield a mixture; and firing the mixture, so as to yield a sintered body.

[5] A flat panel display comprising:

a backplate including a cathode structure;

a faceplate including a fluorescent pixel area; and

a flat panel display spacer interposed between the backplate and the faceplate and formed from a sintered body containing Al_2O_3 , TiC, MgO, and TiO_2 , wherein the sintered body includes 35 to 55 wt % of MgO with respect to the total weight of Al_2O_3 , TiC, MgO, and TiO_2 .